

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 03/09/00

Date Received: 02/25/00

Project: Metro Self Monitor, PO #M63623

Date Extracted: 02/28/00

Date Analyzed: 02/29/00

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickle</u>	<u>Zinc</u>
M63623 002139-01	0.17	0.10	0.15	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

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Project: Metro Self Monitor, PO #M63623

**QUALITY ASSURANCE RESULTS  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 002139-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.17	0.17	0	0-20
Copper	mg/L (ppm)	0.10	0.12	18	0-20
Nickel	mg/L (ppm)	0.15	0.14	7	0-20
Zinc	mg/L (ppm)	<0.05	<0.05	nm	0-20

Laboratory Code: 002139-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	% Recovery MSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	0.17	85	85	80-120	0
Copper	mg/L (ppm)	5	0.10	83	79 vo	80-120	5
Nickel	mg/L (ppm)	10	0.15	84	87	80-120	4
Zinc	mg/L (ppm)	5	<0.05	87	91	80-120	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD
Chromium	mg/L (ppm)	5	93	94	80-120	1
Copper	mg/L (ppm)	5	89	90	80-120	1
Nickel	mg/L (ppm)	10	94	94	80-120	0
Zinc	mg/L (ppm)	5	97	97	80-120	0

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

vo - The value reported fell outside the control limits established for this analyte.



**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Jensen, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

March 9, 2000

**DUPLICATE COPY**

**INVOICE #00ACU0309-5**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M63623 - Results of testing requested by  
Gerry Thompson for material submitted on February 25, 2000.

1 sample analyzed for Total Chromium,  
Copper, Nickel, and Zinc  
by Method 6010 @ \$80 per sample

\$ 80.00

Amount Due .....

\$ 80.00

FEDERAL TAX ID (b) (6)

FRIEDMAN & BRUYA, INC.

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FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

March 9, 2000

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 25, 2000 from your Metro Self Monitor, PO #M63623 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Dianne C. Hurt  
Project Manager

Enclosures  
ACU0309R.DOC